

**COMMONWEALTH OF MASSACHUSETTS**

**DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY**

Investigation by the Department on its own motion  
into the appropriate regulatory plan to succeed price  
cap regulation for Verizon New England, Inc. d/b/a  
Verizon Massachusetts' retail intrastate  
telecommunications services in the Commonwealth  
of Massachusetts

DTE 01-31

**SUPPLEMENTAL SURREBUTTAL TESTIMONY OF**

**DEBORAH S. WALDBAUM**

**ON BEHALF OF AT&T COMMUNICATIONS OF NEW ENGLAND, INC.**

November 13, 2001

1    **Q.     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A.     My name is Deborah S. Waldbaum. My business address is 6400 S. Fiddlers  
3           Green Circle, Suite 800, Englewood, Colorado.

4    **Q.     ARE YOU THE SAME DEBORAH WALDBAUM THAT SUBMITTED**  
5           **TESTIMONY ON BEHALF OF AT&T IN THIS PROCEEDING ON**  
6           **AUGUST 24, 2001 AND ON NOVEMBER 1, 2001?**

7  
8    A.     Yes.

9    **Q.     HAVE YOUR OCCUPATION AND QUALIFICATIONS REMAINED THE**  
10           **SAME SINCE YOUR NOVEMBER 1, 2001 TESTIMONY?**

11  
12   A.     Yes.

13  
14   **Q.     WHAT IS THE PURPOSE OF THIS ADDITIONAL SURREBUTTAL**  
15           **TESTIMONY?**

16   A.     When I filed surrebuttal testimony on November 1, 2001, Verizon had not yet  
17           responded in full to ATT-VZ 2-8 which requested a list of the numbers  
18           attributable to AT&T in the E911 database. Verizon submitted its supplemental  
19           response to this information request on November 2, 2001, providing a compact  
20           disk with the statewide E911 records for AT&T as of October 30, 2001. Based on  
21           the data provided by Verizon, I have determined that Robert Mudge's testimony  
22           is misleading in its reliance on data from the E911 database. Mr. Mudge claims  
23           that the E911 database understates the extent of CLEC competition, while my  
24           present investigation indicates that the E911 database is likely to substantially  
25           *overstate* the extent of CLEC competition. The purpose of this additional  
26           surrebuttal testimony is to demonstrate once again why the E911 database is an  
27           inaccurate and unreliable measure of competition in Massachusetts.

1   **Q.     PLEASE IDENTIFY THE MUDGE TESTIMONY THAT IS**  
2   **MISLEADING.**

3   A.     On page 12 of his initial testimony filed on April 12, 2001, Mr. Mudge states  
4           (emphasis added):

5           One form of full facilities-based competition in Massachusetts uses an  
6           existing cable network combined with a telecommunications switch to  
7           provide dial tone, switching for local and long distance calling, vertical  
8           features, and Internet access. Since these carriers serve customers without  
9           ever touching the Verizon MA network, it is necessary to use estimates to  
10          determine the number of lines they serve. CLEC customer listings in the  
11          E-911 database captures lines that are served by these carriers. [<sup>1</sup>]  
12          However, the total lines may be understated if a customer has multiple  
13          lines but only one E-911 listing (e.g., a PBX with one main listed  
14          number). *Although the numbers are somewhat understated*, they still  
15          demonstrate the extensive reach of competition for both residence and  
16          business customers throughout the state.

17

18   **Q.     WHY IS MR. MUDGE'S STATEMENT THAT THE E911 DATABASE**  
19   **UNDERSTATES THE EXTENT OF CLEC COMPETITION**  
20   **MISLEADING?**

21   A.     Mr. Mudge's statements imply that competition can simply be measured by the  
22           volume of telephone numbers assigned to and used by a particular carrier's  
23           customers as reflected in the E911 database. This is simply not the case. While  
24           volume of numbers in use by any one carrier's customers may suggest  
25           competitive entry, its relationship to the service provided and the facilities used to  
26           provide such service is, at best, tenuous. Rather, the purpose of the inclusion of  
27           telephone numbers into the database is to ensure proper emergency response for

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<sup>1</sup> As Dr. Mayo explains in his surrebuttal testimony filed on November 1, 2001, Mr. Mudge has since retracted the claim that the listings in the E911 database represent customers that are served by CLECs without the use of Verizon facilities. *See* Surrebuttal Testimony of John W. Mayo, D.T.E. 01-31 (November 1, 2001) p. 13. As Mr. Mudge admitted in his rebuttal testimony, those E911 listings also include customers being served using Verizon's special access services. *See* Rebuttal Testimony of Robert Mudge, D.T.E. 01-31 (September 21, 2001) p. 5.

1 '911' users. As Mr. Mudge acknowledges, the entry of numbers into the E911  
2 database is "the responsibility of the provider performing the switching function  
3 on the line." However, Mr. Mudge assumes that all CLECs "load the same type  
4 of end-user access lines into the database as Verizon MA." ATT-VZ 2-1 (a-b).  
5 Based on my investigation of the AT&T numbers in the E911 database that  
6 Verizon provided to AT&T on November 2, 2001, and follow up conversations  
7 with AT&T personnel responsible for providing AT&T's telephone numbers to  
8 the E911 database, I can say that Mr. Mudge's assumption is not valid.

9 The compact disk with AT&T's E911 records, as well as AT&T's  
10 methods and procedures for updating the E911 database, reveal that it is the  
11 protocol of AT&T to report to the E911 database *every* telephone number behind  
12 a PBX switch, including direct inward dial ("DID") numbers, when a customer  
13 migrates from an ILEC to AT&T. Because AT&T does not know which ported  
14 telephone numbers are DID numbers, AT&T routinely loads all telephone  
15 numbers in the E911 database to ensure that the database includes all lines that are  
16 necessary for prompt emergency response. This practice results in the E911  
17 database including a significantly larger number of telephone numbers than the  
18 actual facilities needed to provide the service.<sup>2</sup> While I do not know how other  
19 CLECs report their numbers, I can say that AT&T is one of the major CLECs and

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<sup>2</sup> AT&T's Network engineering standards allow for up to 500 DID telephone numbers for each T-1 facility purchased by a customer. AT&T may not include DID numbers when a customer uses telephone numbers from a block of numbers assigned to AT&T because AT&T has specific information on which numbers are only DID.

1 that Verizon's erroneous assumption regarding AT&T's practices invalidates  
2 Verizon's measure of CLEC market share based on the E911 database.

3 **Q. PLEASE EXPLAIN HOW AT&T'S E911 RECORDS SHOW THAT**  
4 **VERIZON'S ASSUMPTION REGARDING CLEC ENTRY OF**  
5 **TELEPHONE NUMBERS IN THE E911 DATABASE IS WRONG.**

6 A. AT&T's E911 records, as provided on the compact disk attached to Verizon's  
7 supplemental response to ATT-VZ 2-8, were reviewed by me and my client,  
8 Amin Chaudry, the District Manager for Provisioning National Support. Mr.  
9 Chaudry supervises the "E911 Team" responsible for updating the E911 database  
10 with relevant information on AT&T's local network services ("LNS") customers  
11 and identifying and resolving data errors in the database for these LNS customers.  
12 Mr. Chaudry's E911 responsibilities include the oversight of the entry of  
13 telephone numbers and addresses of AT&T's Massachusetts business customers.

14 Mr. Chaudry and I picked several E911 telephone numbers from the list  
15 provided by Verizon and matched them with AT&T's database of customers. We  
16 confirmed (a) that the telephone numbers we investigated represent AT&T  
17 customers and (b) more importantly, that, unlike Verizon telephone numbers in  
18 the E911 database, the AT&T telephone numbers represent all of the telephone  
19 numbers associated with a business customer, not just the "lead" number.

20 AT&T's reporting goes beyond the minimum industry standard by which carriers  
21 report only the main or "lead" number of the customer. In other words, AT&T  
22 frequently reports all numbers behind a PBX switch, while Verizon apparently  
23 reports only the main number.

1   **Q.    HOW DO YOU KNOW THAT VERIZON REPORTS ONLY THE MAIN**  
2   **NUMBER TO THE E911 DATABASE?**

3   A.    Based on AT&T's experience when it obtains a Verizon customer with a PBX  
4       switch, it is my understanding that Verizon adheres to the industry standard of  
5       only reporting the "lead" number of a PBX switch. I make this conclusion based  
6       on the fact that when AT&T acquires a former Verizon customer with a PBX,  
7       AT&T sends to the E911 database all of the numbers behind the customer's PBX.  
8       Although the lead number goes through without error (that is, it is treated as a  
9       simple "migration" from Verizon to AT&T), the remaining numbers are rejected  
10      for migration because they are not included in the information originally provided  
11      by Verizon. AT&T must re-send those numbers with an "insert/new" designation  
12      in order for them to be captured in the database.

13   **Q.    DOES MR. MUDGE MAKE ANY OTHER STATEMENTS THAT ARE**  
14   **MISLEADING?**

15   A.    Yes. On page 7 of his rebuttal testimony, filed September 21, 2001, Mr. Mudge  
16       states:

17               Dr. Selwyn provides a hypothetical example of a PBX customer that  
18               implies that the numbers provided by Verizon MA are exaggerated. Since  
19               the E911 database contains fewer than [BEGIN PROPRIETARY    END  
20               PROPRIETARY] CLEC listings for PBX services, a relatively small  
21               percent of the total CLEC listings, Dr. Selwyn's suggestion that Verizon  
22               MA's estimate of competitive lines is "exaggerated by several hundred  
23               thousand lines" is not correct."

24

25   **Q.    WHY IS MR. MUDGE'S STATEMENT ABOUT THE NUMBER OF CLEC**  
26   **LISTINGS FOR PBX SWITCHES MISLEADING?**

27   A.    Mr. Mudge's figure for the number of CLEC listings for PBX services is  
28       significantly understated. Based on my review of the AT&T records provided by

Verizon in its supplemental response to ATT-VZ 2-8, it is clear that AT&T codes customers with a PBX switch as “Business,” rather than coding such customers as “Business PBX.” AT&T submits this business “class of service” code with each telephone number entered in the E911 database for an AT&T customer with a PBX switch. It can be assumed that Mr. Mudge obtained the number of CLEC PBX listings that he propounds in his testimony from this “class of service” code accompanying the numbers in the E911 database. Mr. Mudge’s figure, therefore, does not include all of AT&T’s PBX customers because such customers are coded “business”, rather than “business PBX.” Since the “class of service” code is a guideline, and not a requirement, for entries in the E911 database, I do not know how many CLECs code their PBX customers in the same way as AT&T and, therefore, I cannot estimate by how much Mr. Mudge understates the figure for CLEC PBX listings. However, simply based on the number of AT&T PBX customers, the number of CLEC PBX listings in the E911 database, and therefore the exaggeration of CLEC lines by Verizon, may be so large that it may change the calculation of CLEC market share by a substantial percentage.

**Q. WHAT DOES YOUR RECENT INVESTIGATION INDICATE ABOUT THE RELIABILITY OF VERIZON’S USE OF THE E911 DATABASE TO COUNT LINES?**

A. The investigation of the information provided by Verizon in its supplemental response to ATT-VZ 2-8 demonstrates, yet again,<sup>3</sup> that the E911 database is not an accurate indicator of the number of access lines in Massachusetts. The E911

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<sup>3</sup> See Direct Testimony of Lee Selwyn, D.T.E. 01-31 (August 24, 2001).

1 database may overcount and it may undercount lines, depending on how CLECs  
2 report to the E911 database. The only measure available which provides a fair,  
3 apples-to-apples count of access lines is the methodology used by the FCC to  
4 count lines by carriers for inclusion in the FCC Report on Local Telephone  
5 Competition. The FCC provides detailed instructions to ILECs and CLECS about  
6 how to count access lines. (See the instructions for completing an FCC Form 447,  
7 the local competition reporting form, attached as Exhibit A.) This standard and  
8 regulated method for counting lines is far more accurate than the unorthodox use  
9 of the E911 database to measure competition.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 **A. Yes.**